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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,316	05/18/2006	Svend Eskil Garnaes	378/9-2184	2792

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EXAMINER

TSAI, CAROL S W

ART UNIT	PAPER NUMBER
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2857

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	01/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/561,316	Applicant(s) GARNAES, SVEND ESKIL	
	Examiner Carol S. Tsai	Art Unit 2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 6-10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 May 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because the blank boxes shown should be labeled as to their function, for example: elements 3, 6, 9 in Figs. 1 and elements 3, 6, 8, and 9 in Figs. 5-16, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 6-10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 5. See MPEP § 608.01(n). Accordingly, the claims 6-10 not been further treated on the merits.

Allowable Subject Matter

3. Claims 1-5 are allowed.

4. The following is a statement of reasons for the indication of allowable subject matter:

U.S. Patent No. 4,883,087 to Nielsen in view of U.S Patent No. 5,056,554 to White are references closest to the claimed invention. Nielsen in combination with White disclose a method of executing a leak control system (1) comprising at least one stop valve (2) with an associated flow meter (3) arranged in the supply pipe (4) of the pipe installation, and at least one stop valve (5) with an associated flow meter (6) arranged in the return pipe (7) of the pipe installation, said stop valves (2, 5) as well as associated flow meters (3, 6) being connected to a control box (8), characterized in that the control box comprises at least one valve monitor (9) connected to each stop valve (2, 5) to control/record the possible state of the individual stop valve (2, 5): open or closed. However, Nielsen in combination with White do not teach an executer which is started by the control logics of the control box in consideration of the operating conditions of the pipe installation, and which performs a given sequence of actions during which it controls/monitors the valve monitors (9), which leak control system (1), on the basis of start and execution of the sequence of actions, performs a number of measurements and data collections on the basis of which it subsequently evaluates the functionality of the stop valves (2,

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5) and/or the elasticity and/or the tightness of the pipe installation; and including all of the other limitations in the respective independent claims.

Conclusion

5. This application is in condition for allowance except for the following formal matters:

Objections to Drawings and claims.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Summers et al. disclose an apparatus and method for simply and economically detecting leaks in a isolation valve disposed in an on-line fluid transport system having at least an upstream pipe and a downstream pipe, the apparatus comprising a isolation valve connected between the upstream pipe and downstream pipe for isolating fluid flow through the transport system; wherein the isolation valve includes at least one upstream seal, one downstream seal, and an inner cavity effectively isolated from the fluid flow by the seals.

Hasselmann discloses a method for detecting leaks in a fluid pipeline where the pressure

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supply pump remains ON during the test procedure and pressure on both sides of a closed shut-off valve in the pipeline is maintained equal.

Rolker et al. disclose method of and apparatus for testing the tightnesses of two valves arranged in a fluid line.

Cerruti et al. disclose apparatus for detecting fluid leakage past a control valve in a system for controlling and measuring the flow of a fluid in a conduit of the type having first and second control valves, a flow sensing element of the differential pressure type located in the conduit between the control valves and a differential pressure flow rate indicator connected to the flow sensing element through high and low pressure conduits.

Oda et al. disclose a leak fuel collection apparatus of the internal combustion engine using leak oil collection pipe fuel, by which the improvement in fuel consumption and exhaust emission can be achieved by improving the combustion condition of the leak fuel mixed with fresh air in the cylinder in correspondence with the engine operating conditions.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carol S. Tsai whose telephone number is (571) 272-2224. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cswt
January 24, 2007
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CAROL S.W. TSAI
PRIMARY EXAMINER